TESTIMONY OF STEPHEN L. JOHNSON ADMINISTRATOR U.S. ENVIRONMENTAL PROTECTION AGENCY BEFORE THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

February 6, 2007

Good morning Madam Chairman and Members of the Senate Committee on Environment and Public Works. I appreciate the opportunity to appear before you today to discuss EPA's significant progress in our efforts to accelerate the pace of environmental protection.

INTRODUCTION

Regardless of rhetoric, our environmental record is clear. America's air, water and land are cleaner today than it was a generation ago; and under the Bush Administration this progress continues.

Two of the five most health protective clean air rules in EPA's history – the Clean Air Nonroad Diesel Rule and the Clean Air Interstate Rule (CAIR) – were implemented during the tenure of President Bush. And, as part of our new clean diesel rules, last October, America's gas stations were primed to pump ultra-low sulfur diesel fuel – the single greatest achievement in clean fuel since lead was removed from gasoline. When fully implemented, these efforts are estimated to prevent approximately 37,000 premature deaths and result in well over \$250 billion in health and welfare-related benefits annually.

The Bush Administration's recent record of success also includes the introduction of the Clean School Bus USA program to help protect our nation's children from diesel exhaust, the establishment of the renewable fuel standards to spur the nation's progress on energy security and cleaner-burning fuels, and the removal of the

reformulated gasoline oxygenate requirement that resulted in MTBE threatening the quality of our drinking water.

At EPA, we are meeting the President's goal of accelerating the pace of environmental protection while maintaining our nation's economic competitiveness by putting both people and property back to work. By encouraging the cleanup and redevelopment of America's abandoned and contaminated waste sites, EPA's Brownfields program has leveraged more than \$8.8 billion in private investment, helped create more than 41,000 jobs, and resulted in more than 9,100 site assessments.

In addition to strengthening standards and promoting stewardship, EPA is committed to vigorously enforcing our nation's environmental laws. In fiscal year 2006, we obtained commitments from industry, governments, and other regulated entities to reduce pollution by nearly 900 million pounds. Our enforcement work has resulted in a sustained three-year record of pollution reduction, totaling almost 3 billion pounds, and requiring companies to invest almost \$20 billion in pollution control equipment.

The American people deserve environmental results, and that is exactly what EPA and the Bush Administration are delivering. I look forward to continuing a constructive dialogue on how to build on this record of success. Environmental responsibility is everyone's responsibility, and by all of us working together, we can meet today's challenges, while ensuring we hand down a healthier, cleaner environment to future generations.

Now let me turn my attention to the actions or decisions you asked me to address at this hearing. Unfortunately, each of these topics has been the subject of misinformation, and I welcome the opportunity to set the record straight. Regardless of the rhetoric, EPA's strong environmental record is clear. These decisions and actions all accelerate the pace of environmental protection. They all deliver environmental results. And they all encourage innovation and collaboration by using the best available science to inform decision-making.

MODERNIZATION OF EPA LIBRARIES

One way EPA is accelerating environmental progress is by making an unprecedented amount of environmental information more accessible to the public than ever before by posting materials on the Internet and converting paper documents to digital format. Demand for this type of information is high. In December 2006 alone, we received more than 230 million hits and more than 92 million page requests from EPA's web site, an increase of about 40 percent over this same time in 2005 [see attachments]. This does not happen by accident – much work has been done to make information available to the widest possible audience. For several years we have been looking at ways to provide the public with better access to EPA materials through the use of the Internet and modernization of our library systems. EPA is in good company with this effort as more and more libraries across the country are proceeding with modernization efforts.

EPA is committed to providing the broadest possible access to environmental information, including the technical documents and reports currently contained in our libraries. To act on this commitment, we are making our full collection of environmental information accessible to scientists and the public through a variety of mechanisms [see attachment]. Our vision is to be the premier model for the next generation of federal libraries by enhancing the electronic tools and resources that people use to look for information, while continuing to provide traditional library services. Let me also assure you that unique EPA material has been retained, catalogued, and is available to EPA and the public.

EPA began this modernization effort to provide more people with better access. Over the last several years, EPA saw a decline in the walk-in traffic at many of our libraries. Coupled with the explosive growth in on-line and other electronic media, we examined ways to modernize our library system to seek a balance between physical library space and automated resources. We discontinued walk-in services at five of our

26 libraries and reduced the hours of operations at some other libraries. However, the services provided remain unchanged.

Through this modernization effort, we are providing more information to a greater audience than ever before. Our research libraries remain open for use by our scientists, and EPA employees continue to have electronic access to additional information from more than 120,000 resources from their desktops. We also plan on continuing a strong network of physical libraries. Some will serve as repositories to hold hard copies of our collection and some will continue to provide walk-in services.

To ensure that our efforts move forward, I have asked the Agency's new Assistant Administrator for Environmental Information and Chief Information Officer, Molly O'Neill, to conduct an assessment of where we are and to evaluate our overall library modernization effort. As we have throughout this effort, we will continue to share our information with our employees, stakeholders, and library users.

In the meantime, our collection of approximately 500,000 items (including books, journals, microfiches and other items) is accessible today, and digitized versions of EPA documents will allow even greater access to more people, in a more timely and efficient manner. We will complete digitization of the unique EPA documents¹ that were held by EPA libraries that no longer provide walk-in services in the near future.

In summary, our library modernization effort has and will continue to provide more people with more access to EPA information, both online and through traditional library services. The public and EPA scientists continue to have access to EPA's robust Online Library System (http://www.epa.gov/natlibra/ols.htm), as well as EPA documents digitized to date (more than 25,000) from the National Environmental Publications Internet site (http://nepis.epa.gov/), and over 7,000 titles in hard copy free of charge from the National Service Center for Environmental Publications. To facilitate access to

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¹ Unique EPA documents are documents created for or by EPA. Due to copyright law, EPA cannot digitize copyrighted materials.

materials, EPA libraries post information on its web site about how to request hard copy documents and obtain answers to questions. Members of the public who do not have Internet access can request EPA documents from their public library via the On-Line Computer Library Center's (OCLC's) Interlibrary Loan Services. OCLC includes 41,555 libraries across the world.

TOXICS RELEASE INVENTORY (TRI) PROGRAM IMPROVEMENTS

Our programs in air, water, land and toxics are all designed to ensure the health and safety of the American people and our environment. The Toxics Release Inventory (TRI) program is one of those programs. TRI has contributed to the reduction of chemical releases and better waste management practices. We want to see this trend continue.

As you know, EPA's TRI program provides information on the releases and waste management activities for nearly 650 chemicals reported from industry. Environmental information has many uses, and one of the most effective is to encourage facilities to reduce their emissions. As successful as the program has been, we have been challenged by the fact that, at a national level, reductions in TRI releases have plateaued [see attachment]. So we have asked ourselves: How do we achieve further reductions? How do we encourage zero releases and better waste management practices? How do we accelerate this program?

We began looking at these questions in response to requests that the Agency consider whether the reporting burdens associated with TRI could be reduced. We agreed, but only if the burden reduction opportunities identified allowed us to continue to provide useful information to communities. Our changes to the TRI program have accomplished this goal.

In short, providing incentives to encourage better waste management practices is good for the environment, good for facilities, and good for the people who live around them. The final rule provides such incentives.

As a result of our review, on December 18, 2006, EPA announced a final rule that expands eligibility for TRI reporters who meet certain narrow criteria to use the shorter "Form A" in lieu of the "Form R." In the new final rule, certain facilities will be able to provide more efficient reporting if they can meet one of two requirements: (1) completely eliminate environmental releases of Persistent, Bioaccumulative, and Toxic chemicals (known as "PBTs"); or (2) reduce the non-PBT chemical releases to no more than 2,000 pounds over the course of a year as part of an overall limit of 5,000 pounds of total waste management. The reduction in reporting is about 15 hours for each PBT report submitted on a short form and about 9 hours for a non-PBT chemical. Under this rule, facilities must continue to report for dioxin and dioxin-like compounds on the more detailed Form R regardless of the amount used or released.

For the first time, facilities may use the shorter, less onerous reporting form for PBTs when there have been *no releases* into the environment and the total amount of the PBT chemical managed by treatment, energy recovery, and/or recycling is not more than 500 pounds. The final rule enables us to reduce the reporting burden for those reporters that are successfully managing their facilities to ensure there are zero releases to the environment.

The final rule encourages businesses to reduce their chemical emissions and increase proper recycling and treatment, which are both good for the environment and good for the economy. By structuring expanded "short form" eligibility for TRI chemicals in this way we are encouraging practices such as recycling and treatment over disposal and other releases. The result is a cleaner environment for us all.

Members of the Committee, I want to provide clarification on two important points regarding this rule: (1) The final rule does not exempt any facility from reporting its

releases, nor does it remove any chemicals from the TRI; and, (2) It has no impact on the primary source of information for emergency responders – first responders receive chemical inventory data under Section 312 of the Emergency Planning and Community Right to Know Act, not from TRI.

In all, the Agency has spent many years evaluating various ways to strengthen the TRI program. As part of this effort, EPA announced in the fall of 2005 that it was exploring possible revisions to the frequency of reporting. No changes were proposed, but EPA notified Congress and the public that it was considering such changes. After careful consideration of the issues involved and the public comment received, EPA announced on December 18, 2006 that it will maintain annual TRI reporting. EPA concluded that consistent annual reporting adds significant value to the information collected, and furthers the statutory purposes of the program.

Additionally, beyond just utilizing the Agency's regulatory authorities, EPA is improving TRI by expanding the use of available technology to expedite the submission and availability of TRI data. Technological improvements to the TRI Program include: the Electronic - Facility Data Release (e-FDR); and, a new web-based version of the Toxics Release Inventory – Made Easy (*TRI-ME*) software. Through these improvements to the TRI, we are expediting the submission and availability of TRI data. We expect this trend to continue in the future.

I am committed to providing the public timely and reliable information. By retaining annual reporting and encouraging businesses to reduce their chemical emissions and increase recycling and treatment, EPA is ensuring the TRI will continue to serve as an important source of information on chemical releases from facilities nationwide.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) REVIEW PROCESS

Central to ensuring clean air across the nation are the national ambient air quality standards (NAAQS) that EPA sets under the Clean Air Act (CAA). As part of this charge, we are required to review the science upon which the NAAQS are based and the standards themselves every five years. But the fact is the process is broken. In the past, EPA has often failed to complete reviews in the statutory timeframe [see attachment]. We have also found it impossible to use the most up-to-date scientific information when following the inefficient past process for NAAQS review.

In an effort to address these issues, Deputy Administrator Marcus Peacock requested a thorough review of the process. In particular, he asked that the review focus on four key areas: (1) timeliness (i.e. how to complete NAAQS reviews on a 5-year cycle as required by the CAA); (2) consideration of the most up-to-date scientific information; (3) clarifying the differences between scientific and policy judgments; and, (4) defining and expressing uncertainties in scientific and technical information. To help accomplish this task, EPA formed an internal workgroup that consulted with environmental and public health groups, industry, States, and the Clean Air Scientific Advisory Committee (CASAC) -- the group of independent scientific experts established under the CAA to provide the Agency with advice and recommendations on the scientific basis and adequacy of NAAQS. CASAC indicated that "[N]ow is the time to think 'outside the box' and develop a significantly-enhanced and streamlined NAAQS review process." I agree.

As a result of our internal deliberations and input from stakeholders and CASAC, EPA is changing the way we review NAAQS to enhance the efficiency, transparency, and accountability of the process while protecting its scientific integrity.

To ensure a more effective, streamlined process, EPA will develop and implement a single integrated plan to guide the entire review of each NAAQS, rather than the two-phased planning approach that has been used in the past. We will focus

on providing the complete record of the available scientific information in a science assessment support document and producing a concise Integrated Science Assessment -- rather than a voluminous Criteria Document -- to inform decision-making. We are also moving towards a continuous review of the latest scientific evidence, supported by a state-of-the-art scientific database. In addition, we will issue a concise Risk and Exposure Assessment focused on identifying the major risks and uncertainties.

Finally, we will issue our policy assessment as an Advance Notice of Proposed Rulemaking (ANPR) that will reflect Agency views on the appropriate range of policy options. The addition of an ANPR will result in a more open and transparent process by seeking the public's input on Agency management's views earlier and more frequently than what previously occurred. In this way, the NAAQS process will be consistent with EPA's approach to rulemaking in virtually every other arena.

CASAC will continue to have multiple opportunities to provide advice and recommendations throughout the NAAQS review process, both with regard to the underlying scientific and risk information and the policy options being considered by the Agency [see attachment]. EPA appreciates the important contribution CASAC makes to the NAAQS process and the revised process respects and preserves CASAC's role.

EPA is committed to meeting the five-year deadline for review of the NAAQS through this improved process. The changes we are instituting will enhance the Agency's ability to issue timely, well-informed policy decisions based on the best available science while continuing to promote broad participation by experts in the scientific community.

LEAD NAAQS REVIEW

Exposure to lead poses significant dangers, particularly to children, and we are committed to protecting public health and welfare from the dangers of lead. EPA is currently reviewing the NAAQS for lead, which was listed as a criteria pollutant in 1976, and EPA issued the first lead NAAQS in 1978. As with all of our reviews and regulations, we undertake this effort to help ensure that we continue to protect public health and our environment.

We are proud of the progress EPA has made since the 1970s in reducing lead emissions and levels of lead in ambient air. As a result of the ban on lead additives in motor vehicle gasoline, implementation of the NAAQS, and other EPA regulations and programs, including efforts to reduce lead in housing, average lead concentrations in the air have dropped by more than 95 percent since 1980. There has been a significant shift not only in the magnitude of emissions, but also in the types of sources with the greatest lead emissions. In addition, the 1990 CAA Amendments required EPA to regulate lead compounds as hazardous air pollutants under section 112. As required by section 112, EPA has established technology-based emission standards (called Maximum Achievable Control Technology, or "MACT," standards) for many facilities emitting lead compounds, and will establish additional risk-based standards for those industries where additional protection from residual risks is necessary. Moreover, EPA has worked hard to reduce the risk of lead exposure through a variety of other programs, including Superfund and drinking water programs and lead paint initiatives. EPA remains strongly committed to protecting public health and the environment from the dangers of lead pollution, and will carefully consider potential impacts -- including impacts on children -- of any regulatory decision regarding lead.

We are still very early in the process of reviewing the NAAQS. As part of our review, we have issued a completely revised lead Criteria Document that presents a comprehensive, up-to-date summary of our knowledge about lead and its effects on human health and the environment. We have a great deal of scientific evidence that

associates lead with significant adverse effects on human health, especially for children, at much lower levels in the body than we previously knew. We will consider all of this information in reviewing the lead NAAQS and making decisions about whether revisions to the standards are appropriate. As we move forward in this lead NAAQS review, we will review the most up-to-date science, assess risks and exposures, and develop appropriate policy options in light of all the available information.

EPA'S RECENT PROPOSAL TO REPLACE THE ONCE-IN-ALWAYS-IN POLICY

Another vital component of our clean air program is the comprehensive regime established by section 112 of the CAA for reducing toxic air pollutants. CAA section 112 lists over 180 chemicals as hazardous air pollutants and includes several provisions requiring control of emissions of these pollutants into the air. Under section 112, EPA establishes Maximum Achievable Control Technology (MACT) standards, and these standards generally apply only to "major sources." Major sources are facilities that emit or have the potential to emit, "considering controls," 10 tons per year or more of a single toxic air pollutant or 25 tons per year or more of any combination of toxic air pollutants. Facilities that emit less than these amounts are called "area sources." The CAA requires EPA to establish standards for area sources, and these standards can be less stringent than the MACT standards. While the law plainly defines what constitutes a "major" and "area" source, the CAA is silent as to when controls must be in place for the purpose of assessing a source's emissions and determining whether that source is a major or area source.

In May 1995, EPA issued the "once in, always in" policy to address the issue of when controls must be in place. The policy generally provides that only the controls in place by the deadline for complying with the MACT standard count in determining whether the facility is a major or area source. Under the policy, if a facility emits at or above the major source threshold levels on the compliance date of the MACT standard,

the facility will always be subject to that MACT standard, even if the facility later adds controls that reduce its emissions below major source levels.

The current policy is environmentally counterproductive. For example, we heard from several states and industry representatives that the current policy discourages facilities from instituting new pollution prevention measures after a MACT standard applies because, even if a facility later reduces toxic emissions through pollution prevention measures, it must continue to comply with the MACT standard and other related requirements. The policy also creates an uneven playing field by allowing facilities to avoid major source status if they put on controls before the MACT standard applied, but not if they added controls after that date.

The "once in, always in" policy was issued in the form of a memorandum and was intended to be only temporary. In light of its importance in determining the applicability of MACT standards, the Agency stated in the memorandum announcing the policy that it intended to arrive at a final approach through rulemaking. In December of last year, EPA began that rulemaking process by announcing a proposal that would replace the once-in-always-in policy. Under the December proposal, a major source could become an area source at any time if it limits its potential to emit toxic air pollutants to below the major source threshold levels. The source would be required, however, to obtain a permit that limits it emission to below the major source levels, and would be subject to any area source standard applicable to its industry sector.

A major source that made the capital investment necessary to reduce its potential to emit to below the major source threshold levels could become an area source at any time, provided it has a permit that appropriately limits its potential to emit. As part of the rulemaking, we are seeking more information on sources' likely responses to the proposed approach so that the Agency can better assess the potential emissions implications before making a final decision. We look forward to receiving and evaluating public comments on the proposal.

PERCHLORATE AND THE IMPORTANCE OF SCIENCE

One of my key principles is to use the best available science for decision-making to accelerate the pace of environmental protection in our country, and this principle extends to perchlorate. To inform our decision-making, we are working with other federal agencies, such as the Food and Drug Administration (FDA), the U.S. Department of Agriculture (USDA), and the Centers for Disease Control (CDC), to gather and understand information on the sources of perchlorate exposure.

When looking at specific contaminants, one of the key factors we must consider is the reference dose (RfD). The reference dose is an estimate of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of adverse effects during a lifetime. To develop the RfD for perchlorate, EPA consulted the National Academy of Sciences (NAS) to ensure a thorough, unbiased application of science. The NAS reviewed available data on the effects of perchlorate, selected the most appropriate study, and applied EPA's science policy guidance in developing an RfD of 0.0007 mg/kg/day, which was subsequently adopted by the Agency.

In carrying out their analysis, the NAS used an approach that protects the most sensitive population, the fetuses of pregnant women who might have hypothyroidism or iodide deficiency. To protect this subpopulation, the NAS recommended that the RfD be derived by taking the dose at which no observable effect (whether adverse or not), is anticipated in healthy adults, and reducing it by a further 10-fold factor to account for sensitive sub-populations. Deriving the RfD to prevent a nonadverse precursor effect is a more conservative and health-protective approach to perchlorate hazard assessment compared to our traditional approach of basing RfDs on prevention of adverse effects.

We know that questions have been raised about the current RfD, particularly given recently published scientific articles. EPA is reviewing and analyzing these findings to assess the relevance of the study results for predicting adverse health

effects that may result from perchlorate exposure. The Agency has a great deal of interest in the findings regarding perchlorate exposure and thyroid function that were recently reported by CDC researchers. The CDC researchers acknowledged that there is a need for additional research to confirm their results and improve upon some of the limitations of the study, and we look forward to reviewing these additional studies.

Regarding the need for federal regulation to address perchlorate, the Safe Drinking Water Act (SDWA) has an established process for determining if unregulated contaminants pose a sufficient risk to public health to warrant regulation. Perchlorate is on our second Contaminant Candidate List (or CCL), which was published in February of 2005. The CCL is a list of unregulated contaminants that may (or may not) require regulation. In the near future, we will propose regulatory determinations on a number of contaminants from that list. This notice will include an extensive update on the Agency's review of perchlorate, including a summary of recent research.

Before the Agency can make a determination as to whether it is appropriate to regulate perchlorate in drinking water (i.e. whether setting a drinking water standard would provide a meaningful opportunity to reduce risk for people served by public water systems), we need to better understand total perchlorate exposure and the relative exposure to perchlorate from water as opposed to food sources, which we refer to as the "relative source contribution." An increasing number of studies have reported the presence of perchlorate in samples of various foods (e.g. milk, lettuce, melons) and with this and other food information becoming available, use of a default assumption for the relative source contribution may not be the best means to determine whether it is appropriate to regulate perchlorate in drinking water. We need to determine whether setting a drinking water standard would provide a meaningful opportunity to reduce risk for people served by public water systems, and we need to understand how public exposure compares to the RfD and what portion of the exposure comes from food versus water.

The Food and Drug Administration (FDA) has been conducting surveys to determine perchlorate levels in food since FY 2004. The Agency is particularly interested in reviewing the results and associated planned exposure assessment from FDA's 2006 Total Diet Study when it has been peer reviewed and finalized. This will be the most comprehensive assessment of food exposure to date and is designed to provide estimates of total food exposure by region based on a representative market basket approach. Additionally, the CDC has included perchlorate in its National Biomonitoring Program which develops methods to measure environmental chemicals in humans, for example, by analyzing blood and urine samples. With this information, the CDC can obtain data on levels and trends of exposure to environmental chemicals in the U.S. population. EPA may be able to use the results of CDC's studies to estimate perchlorate exposure and inform a determination as to whether regulation of perchlorate in drinking water is necessary to protect public health.

Finally, I would like to clarify an issue related to monitoring for perchlorate in public water systems. To support our regulatory development process, the Agency requires short-term monitoring for specific contaminants under the Unregulated Contaminant Monitoring program (UCMR). During the first round of this program, 3,858 water systems were monitored for perchlorate during a one-year period between 2001 and 2003. This monitoring was designed to provide an assessment of perchlorate occurrence in public water supplies that was broadly representative of community water systems throughout the country. Perchlorate was detected at levels above the minimum reporting level of 4 parts per billion (ppb) in approximately 2 percent of the more than 34,000 samples analyzed. The average concentration of the detected values was 9.8 ppb and the median concentration was 6.4 ppb. (For context, the reference dose is equivalent to about 25 ppb in water.) The samples in which perchlorate was detected were collected from 160 of 3,858 public water systems (4% of systems) located in 26 states and 2 territories. We have determined that the existing data is sufficient to support our regulatory decision-making and, as such, it is not necessary to conduct additional perchlorate monitoring under the second UCMR, which in any case would not be completed until 2010. Of course, if EPA determines that regulation of

perchlorate in drinking water is necessary, on-going compliance monitoring of perchlorate would be part of any new standard.

Considering this new information in conjunction with the wider body of research in this area will improve our understanding of perchlorate toxicity and exposure. If necessary, EPA can require additional monitoring at a later time if new information indicates that additional sampling is warranted. EPA will continue to review and analyze new science and information on perchlorate as it becomes available and will rely on the best available science as we move toward a decision on whether or not to regulate perchlorate. EPA is committed to protecting public health, including sensitive populations.

CONCLUSION

Madam Chairman, as I mentioned before, regardless of rhetoric, our environmental record is clear. America's environment has steadily improved over the past 30 years, and under the Bush Administration this progress continues. I am proud of EPA's environmental record. Each of the six actions or decisions that I have described will provide the American people with beneficial environmental results through efficiency, transparency, innovation, collaboration, and the use of the best available science. Thank you for providing me with an opportunity to explain the goals of and reasoning for our decisions. I look forward to working with you in the future and to providing additional information about the activities of this Agency.

I would be happy to address any questions that you may have at this time.

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